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THE GENESEE FARMER.

SATURDAY, JULY 25, 1835.

Remarks of a Traveler.

(CONTINUED.)

Pennsylvania Rail Roads.

"It was not my intention to notice the Rail Roads of this district; but observing a paragraph copied into the Genesee Farmer at page 200, in which they are highly eulogized, it may not be improper to say that the Philadelphia and Columbia Rail Road is a subject of great complaint. I conversed with no person in that quarter, in regard to it, so far as I can recollect, that did not express dissatisfaction. The noise of the steam-cars in passing is so great that at times they may be heard at the distance of two miles,—much resembling the clatter of the instrument called a horse fiddle. The consequence is that many horses are greatly alarmed; and farmers who have to cross the track on their way to Philadelphia approach it under apprehensions of danger. I do not deny that the eulogy to which I have referred, may possibly be correct in the main; but while there is such a strong counter current in public sentiment, it appears to me indiscreet to throw such unqualified commendations before the community.

"I am the more free to make these remarks because the Rail Road from Bordentown to Amboy, presents in this point a great contrast. I travelled on it, going and returning, seventy miles; and never during the whole journey, saw a horse that appeared to be frightened in the least, though many, at different times and places, passed very near us. Of the noise made by our train of cars, I had no means of judging, but presume from what appeared that we must have passed on comparatively in silence. In England, the evidence taken before a committee of the House of Commons, showed that the cars in their passage on the Liverpool and Manchester Rail Road, were scarcely heard at the distance of one hundred yards; and no inconvenience to those who had horses near it, was experienced.

"Of the persons who directed the construction of the Philadelphia and Columbia Rail Road, I have no knowledge whatever; and have stated the foregoing facts without intending to detract from their real merits in the least; but while all admit the great advantages of this kind of road, it ought also to be admitted that whatever frightens the common teams of the country, so as to endanger the lives and limbs of those who are connected with them,—cannot be a proper subject of eulogy."

Repairing Roads.

"Almost every person has an intesest either directly or indirectly in the state of the roads. Almost every person has to assist either by coin or labor in repairing them; and yet while those same individuals would carefully inspect an article of merchandize previous to the purchase, or make a special bargain with a mechanic, they seem to care nothing about the manner in which taxes are applied to the highways.

"This would be less remarkable if those taxes were applied to some foreign object, in which the payer had no immediate interest; but it is far otherwise: These assessments are designed more especially for the benefit of those who pay them. If the sums so levied, are wasted either in consequence of a want of skill or a want of honesty in the agent, the farmer pays taxes to no purpose; and it must therefore become the individual interest of every citizen to inquire if the application has been judiciously made. He would do well also to ask if lighter taxes could not be made to answer the same purpose quite as well? and then endeavor to consider what constitutes a good road. Ought it to be made of *hard* or *soft* materials? Is the *soft mud* from the ditches useful for that purpose? and are *loose stones* lying in the beaten track, a *benefit* or a *nuisance?* I am satisfied that great savings might be made in this department. I am satisfied that absurdities quite as great as carrying a stone in one end of a bag to balance a bushel of corn,—are practiced in these times and among ourselves.

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"Wherever roads pass over inclined plains of much length, it becomes necessary in order to prevent the tracks from being gulled, to have bars or cross ditches to discharge the water that collects in heavy showers, into the side gutters. The usual practice is to fix on certain places, and then cut a ditch through the *indurated* track into the *softer* earth below. This operation always makes a bad spot. The most *awkward*, *unskillful*, and *common* mode is to cut it *diagonally*, so that a two-wheeled carriage without great care, is in danger of oversetting; and a four-wheeled carriage rucked and jolted to its utmost stretch. It is better when made *straight across*.

"But a very superior method of making such repairs, was pointed out to me by the very intelligent proprietor of *Wood Lawn*. The indurated track was not cut; but a cart load or less, of gravelly earth was thrown down, and then spread so as to intercept the water, but not to jostle a carriage on its way. It is a great improvement."

English Farming.

DAIRY HUSBANDRY—BONE MANURE—FLESH COLORED CLOVER—PIG-STIES.

Bagshot Park Farm is as usual, beautifully cultivated, and most scientifically and economically managed by Mr. Burness. No one who does not understand the East Lothian farming can fully appreciate the merits of the system pursued here. All the crops are drilled; and by the force of bone manure, which is drilled in along with the seeds, good crops are raised on the poorest sand. Mr. Burness sows the Trifolium incarnatum on his wheat stubbles, covering the seed with the harrow, but on no account stirring the ground deeper than three inches, and finds a good crop of clover, either for grazing or cutting in the following May. The plants were now from one foot to eighteen inches in height, and in full bloom. This clover was also sown by Mr. Hill, a Northumbrian farmer, in the neighborhood of Mr. Donald, and it seems to be considered a valuable addition to our British clovers. It is strictly an annual, and will on no account live through a second winter. In Mr. Burness' parlor we saw the picture of an ox of the Sussex breed, five years old, fed on the farm without the aid of oil-cake, which weighed 240 stone of 8 lbs., contained 30 stone of fat, and sold for £60. The painting of this ox was by Mr. Steers of High Wycombe. In the farmery are some new sheds for fattening cattle on the plan described by Mr. Newall of Dumfries, in our Encyclopædia of Cottage, Farm and Villa Architecture. In the breeding pigsties, Mr. Burness has introduced a contrivance for preventing the mother from crushing her sucking pigs against the wall. It is simply a shelf carried round the interior of the sty, about nine inches wide, and raised about nine inches from the ground. This shelf prevents the sow from pressing herself against the wall when lying down, and leaves space sufficient between her and it for the pigs to pass. The dry, poor, sandy soil of Bagshot Farm is particularly calculated for being benefitted by bone manure; and Mr. Burness consequently buys many. The price he pays for them is 20d. a heaped bushel: when ground they lose about a tenth of their bulk, and the price for a bushel of dust not heaped is 2d. The bones, after being ground, are mixed with equal parts of turf ashes or sandy soil, and the mixture is laid in heaps for a fornight to ferment, before being spread upon the soil. The fermentation which takes place is most powerful, and, if permitted, it would continue for a long length of time; but a fortnight, which is found absolutely necessary, is also found quite sufficient to render the compost fit for agricultural purposes. This necessity of fermenting bone dust, before spreading it on the soil, should not be forgotten by gardeners, when using it in the composition of vine borders, or as a general manure. Perhaps bones ground, and mixed with soil, might be found an excellent substitute for tan. Mr. Burness has invented a machine for drilling bone dust along with corn, or turnep or other seeds. It may be made to sow six or eight rows at a time, and the distance between the rows can be varied at pleasure. This drill may be had of Messrs. Cottam and Hallen. In feeding both cattle and sheep, oil-cake is frequently given here. Mr. Burness finds that it does not effect the flavor of beef or mutton in the slightest degree; but that it totally changes the character of the fat of pigs.—*Loudon's Magazine.*

Remedy for Fruit Trees Casting their Fruit.

It is well known that although some trees both of peach, apricot, plum, apple, &c. are well furnished with blossom buds, the blossoms often fail in their impregnation, and fall off; and when they are impregnated and set, they fall off at the stoning. Frequently, although they survive the stoning, they become prematurely ripe and fall off, and very few, if any, of the fruit attain maturity, while those which do ripen become vapid and have no flavor. These failures have been proved to arise from unwholesome food, a remedy for which may be found by the following method:—Having selected a tree that is in good condition, and well furnished with blossom-buds, just as the blossoms are beginning to expand, take a potatoe-fork, and with it make holes all over the surface of the space occupied by the roots, (which extends as far from the stem as the branches,) at about eighteen inches apart, forcing in the fork to the full depth of the tines, and giving it a gentle heave, by pressing on the end of the handle; then, having dissolved some niter in water, in the proportion of one ounce to three gallons of water, fill the holes with the solution. No manure must be given; but if, after the stoning of the fruit, the tree should appear unable to sustain its crop of

fruit, the following preparation may be given, in the same manner as the niter: To one gallon of blood add one gallon of water, and one ounce of potash; stir the mixture well, and let it stand for a week or ten days; then pour off the solution from the clot, and, mixing one gallon of this liquid with four gallons of water, give it to the trees as above. The remaining clot may be dissolved by adding to it one quart of slacked lime, and one gallon of water to one gallon of clot, but this solution must not be given to fruit trees, as it will produce the effect which the niter is intended to remedy. It will, however, prove a good manure for the cabbage tribe, celery, &c.—*Gard. Mag.*

Budding or Inoculating.

To insure success in this operation, it is necessary to observe a few particulars, which are not always attended to, but which are of the first importance.

The first and great requisite is to have a thrifty stock, as no skill can enable one to succeed where the stock is of slow and stunted growth. During the growing season, a slimy or mucilaginous substance is constantly forming between the bark and wood. This is denominated *Cambium.* It gradually becomes hardened and forms a new layer of wood, and thus the tree increases in size by the successive deposition of new layers of this substance. Now it is the cambium which is the cement that causes the bud, when inserted, to adhere to the wood of the stock; and as it is always deposited in larger quantities in thrifty trees, such will be invariably found best for successful budding. For the same reason, that season should be chosen for the operation, during which the growth of the stock is most rapid. This will be the case with the plum, cherry and apricot, as soon as the buds are sufficiently matured; but with the peach and nectarine, the operation may be continued as late as the early part of September.

Another essential point, is that the contact between the bud and the stock be as perfect as possible; hence when the bud is removed from the shoot, it should be done with a sharp knife so as to form a straight even surface that will fit closely to the wood of the stock. If the contact of these surfaces is complete, it is immaterial in what way the bud is inserted; whether it be by making a transverse cut at the lower end of the perpendicular one, and so sliding the bud upwards; or by making a cut in the form of the letter T, as is usually practiced, sliding the bud into it downwards.

Another important particular, is not to injure or bruise the cambium. Care should therefore be taken to cut just deep enough to go through the bark, without penetrating the new sap wood. The bark should also be carefully *lifted* up by applying the point of the knife to its edge, and not forced from the wood by inserting a bone or metal blade, as is commonly the case, which always more or less bruises the cambium, and renders it less capable of effecting a cohesion with the bud.

It is true that the operation often succeeds where little care is taken in the last particular; yet success would be always more certain, if these directions were more observed; and it would also prove highly advantageous when the work is performed under unfavorable circumstances, where less skill and attention would be sure to cause a failure.

Budding should never be done when the trees are covered with moisture, as it would then be difficult to prevent its wetting the bud and thus preventing its adhering. Care should also be taken that the ligature be not bound round the stock too tightly, especially if the stock be young and tender; and that it be removed as soon as it begins to cut into the bark.

There are some buds, such for instance as of the peach, which are very liable to be killed by the winter. The danger of this may be avoided by observing on the tree whence the shoots are taken, what buds of last year's growth have withstood the winter; these will be found to be such as grew on the most thrifty shoots, and which were earliest formed in the season. Such are therefore to be selected in budding, as the same buds which remain uninjured upon the tree, will remain unhurt when inserted in stocks.

In the above directions, (founded on the extensive experience of the writer,) it is believed consists the whole secret of successful budding.

The Season.

(*In a letter from Cayuga county of the* 16*th.*)

Last winter, in many places the ground was bare of snow in this quarter, at a time when we had very severe frosts; and the wheat suffered greatly in consequence. In the spring, the prospect of many fields was discouraging; and though the season since that time has been favorable, *the harvest will be lighter than usual.* Some particular fields however, that were more sheltered, will produce fine crops.

The state of vegetation is much *later* than in ordinary years: I should judge about a fortnight. This is not only indicated by the flowering of the Catalpa and Michigan Rose which are now in bloom; but also by the greenness of several sorts of fruit which in other years are generally ripening at this time. Of this kind is the Primitive Pear, the Harvest Pear, and the Yellow Harvest Apple. Even the Primordian Plum, and our earliest Apricots, have scarcely changed color.

Cherries are abundant and very fine. The Black Caroun and the Transparent Gean, are now fully ripe; and the Carnation is just becoming so. The Early Richmond still retans its fruit, though it ripened several weeks ago,—the birds appearing to be neither very numerous nor voracious.

It is worthy of remark that this cherry has increased considerably in size since it was *deemed* ripe, and has acquired a much greater richness of flavor. Do those who allow their neighbors to come and carry off all they can get as soon as the fruit is eatable, ever taste *ripe* cherries? Perhaps they may think so; but they grant a privilege in favor of which in a country like ours but very little can be said.

Of apples there will be a full supply. Pears are generally very thinly scattered over the trees. Apricots will be plenty; and notwithstanding the great number of Peach blossoms that perished, there will be no scarcity; and the fruit in consequence of the branches not being over-loaded, will be the finer. Different varieties of Plums yield very unequally: some bearing heavy burdens, some lighter, and some none at all,—the latter not having recovered from the damage done to their leaves in the *wet* summer of 1833.

My Chinese Mulberry tree is now in fruit. The largest that I measured is nearly three-quarters of an inch long, and about two-fifths of an inch in diameter. When it shall bear plentifully, I think seed may be easily procured. I will endeavor to save all that ripens.

I have seen *no mildew* on any grapes this season. Very few of my vines were laid down or covered last autumn, and yet contrary to my expectations several sorts have fruited well, although they were left on the trellis.

To-day I was shown an instance of the benefit which may be derived from training against buildings. Part of the vine was supported by a fence; another part was fastened to the *east* side of an out-house; and a third part on the *south* side. On this last part, *the grapes are three times as large* as those on the other parts. Whether they will be larger at the time of ripening may be doubted; but it is certain they will be more forward; and this effect, more particularly in the case of the Bland Grape which ripens very late,—will be of great account.

A part of my vines trail on the ground, while other parts of the same vines, are supported by the trellis; and the greater size of the grapes on the ground is worth notice: they are two or three times as large.

Harvesting.

We are informed that one of Hussey's *Grain Cutting Machines* will be put in operation on Tuesday afternoon the 28th inst. on the farm of Gen. Rawson Harmon, Jr. in Wheatland. Mr. Horsford, the agent of the proprietor for this State, will superintend its operations, and the neighboring farmers are invited to attend. Will Gen. Harmon favor the readers of the Farmer with his views as to the utility of the Grain Cutter, after having witnessed its operations?

☞ The communications of "*L. A. S.*" and "*Veritas,*" were not received in reason for this paper. They will appear next week.

Hints on Pruning.

BY JUDGE BUEL.

The principal objects of pruning, are to procure a good bole or trunk for timber; to form a proper head for the production of fruit; and to subserve the purposes of ornament.

To effect these objects with the least trouble and greatest advantage upon all non-resinous trees, the following rules are recommended.

1st. Begin to prune the tree when it is young.

2d. Cut close and smooth to the bole or limb.

3d. Cut, when small, the branches which are likely to interfere, or become useless, and which, if suffered to remain, will require to be removed at a more advanced period of growth.

4th. Do not trim to excess. Let the branches occupy, *at least*, a third of the entire height of a tree.

5th. Do not prune when the tree bleeds.

Where the preceding suggestions are observed, we may add—

6th. Prune in summer.

I proceed to offer my reasons for the rules here recommended, and

First. The food required to nourish the lateral useless branches, will go to increase the diameter and height of the plant, or swell the fruit, if these are judiciously removed. But a main consideration is, that the excision of small branches causes only small wounds, and small wounds speedily heal. The observance of this rule, therefore, facilitates growth, promotes health, and ultimately saves labor.

Secondly. This rule needs very little argu

ment to enforce its propriety, as every observer must have frequently seen and lamented the ruinous effects of an opposite practice. The snags either send out useless spray; or, deprived of the feeble aid of these, they die and rot, and carry disease into the bole, and are thus often the cause of the premature loss of the entire tree. If cut close, the enlargement of the living wood soon covers the wound. In large branches, where the saw must be used, the healing process is greatly facilitated by pearing the cut, particularly the exterior edges, with the pruning knife; and it is good precaution, before you use the saw, to notch under the intended cut, to prevent tearing the bark when the limb falls. In extirpating sprouts from the roots, and neither they nor those growing from the bole should be suffered long to remain, the like precaution of cutting close should be observed; for which purpose it is necessary first to remove the earth from about the collar, with the spade or other instrument.

Thirdly. The reasons for pruning a tree while young, apply here: It is easier to cut small than large limbs, and the wounds of the former sooner heal. But the question presents, what limbs are to be cut? Generally all that are likely to cross each other, all feeble spray, the strongest on the bole, and the weakest in the lop; for while the trees are in nursery, I think it serviceable to leave a few scattering laterals upon the bole, and it is beneficial, at all times, to thin most kinds in the lop. Yet the answer to the inquiry will depend principally upon the species of the tree, and the design of the planter. If his object be timber, the leading shoot should be feathered up in a spiral form, and all other shoots likely to interfere with its growth be cut away. If the object be fruit, beauty and utility are to be consulted, and these are seldom incompatible in the eyes of a fruit grower, for with him productiveness constitutes beauty. If ornament be the main consideration, no special direction can be given, as the species employed, the location, and the taste and fancy of the planter, will have a controling influence. The rule for timber trees will not apply to either those destined for fruit or ornament.

In orchard and garden fruit, generally, the endeavor should be to obtain a low and spreading top. When a clean bole is obtained to a sufficient height, say in the orchard, of seven or eight feet, and in the garden, according to fancy, the leading shoot should be cut in, and three or more arms or branches left to form the head; which, when the habit of the tree will permit it, should be pruned so as to give it a bosom form, or that of a broom divested of its center. Several advantages arise from this and a more extended form. It admits the air and sun more freely, to mature the fruit and wood; it renders the tree less liable to be blown down; it facilitates the gathering of the fruit, and the pruning of the tree. But the principle advantage consists in its tendency to increase oviparous or fruit buds, and consequently to augment the fruit. A great growth of wood seems to be incompatible with a great crop of fruit, and vice versa. A cow which gives much milk seldom takes on much flesh during the milking season. If the secreted food is converted into milk and fruit, there can be but little reasonable hope of its adding to the flesh of the animal, or the wood of the vegetable. Erect branches produce most wood buds, horizontal branches the most fruit buds. Straight limbs produce less fruit than those that are curved or crooked. Whatever retards or diminishes the flow of elaborated sap, in a healthy tree, is favorable to the production of fruit. Hence wall trees, whose limbs are trained in the form of a fan, or in a horizontal direction, fruit better than those that grow upright as standards. Hence young trees are more apt to show blossoms the first and second year after transplanting, than in the two subsequent years. Pomologists have endavored to render this law of vegetation subservient to their interests, by adopting artificial means for inducing the production of fruit buds. These means consist in ring-barking, transplanting, cutting the roots, training, pruning, &c. The pears in the Caledonian Horticultural garden are trained *en quenouille*, that is, the lateral branches are cut in to a short distance of the main stem, and kept so, and the fruit is produced on the spurs growing from these shortened branches. In the Horticultural garden of London, the limbs of the pear are tied down in a drooping position, resembling somewhat in appearance the weeping willow. The vines cultivated at Thomery, celebrated for their superior fruit, are planted eighteen inches apart, trained in the form of a T, the top horizontally, and restricted in their growth to four feet from the main stem. In this way a trellis of eight feet long, and eight feet high, is sufficient for five vines, which produce upon an average 320 bunches of fruit. These modes of training have a common object, that of restricting the growth of wood, and producing an increase of fruit. Those who wish to examine the modes of training, here spoken of, in detail, are referred to Loudon's Gardener's Magazine.

Fourthly. Leaves are as necessary in the economy of vegetation as roots. The sap must be elaborated in these before it can be transmuted into wood, bark, or fruit. A tree cannot thrive, therefore, when these organs are either deficient or deceased. If sufficient leaves, or branches to produce them, are not left to concoct, or digest, the sap, which is propelled from the roots, the tree, to use a modern term, but a just comparison, becomes *dyspeptic*, the vegetable blood is vitiated, the wood loses its texture, and a stinted growth, or premature death, generally ensues. Hence great precaution should be used against excessive pruning.

Fifthly. To prune when the tree bleeds, tends to debilitate, by wasting what is designed as food for the tree. I have known it fatal to the vine. What is termed bleeding, is the flowing of the sap from wounds before it has been converted into aliment. This sap flows most freely while the buds are swelling, and until the leaves are fully capable of discharging their office, as is strongly instanced in the maple, birch, &c. Our orchards are generally pruned in March, which is probably the most unfavorable month in the year for this operation.

Sixthly. The advantages of summer pruning are, that the tree being then in vigorous growth, the wounds heal speedily; and the sap being concocted and thick, does not flow from the wounds, and thereby impair the health of the plant. Summer pruning should not be performed, however, before July, when the new growth has considerably advanced. It may be well to add, as this suggestion may seem unsound, that summer pruning is recommended by the best authorities. "As a general rule," says Pontey, "summer is preferable to winter pruning;" and Sang suspends pruning "from the beginning of February to the middle of July, but carries it on during every other month of the year."*

In regard to evergreens, which with us are confined principally to resinous trees, it is the general practice of nurserymen, and I think it a judicious one, not to prune them till they have acquired some year's growth, and then but sparingly and at long intervals, displacing two or three tiers of the lower branches every two or three years. Monteith says, "never cut off a branch till it has begun to rot, as the bleeding of a live branch will go far to kill the tree."

The implements employed in pruning, and the manner of using them, are matters of moment. If the operation is commenced when the tree is young, and judiciously followed up, a good knife, a small saw, and a chisel fixed on a six foot handle, to trim the tops and extremities of the branches, are all the tools that are required. A large saw will be occasionally wanted; but an axe or hatchet should never be employed, as they fracture the wood, bruise and tear the bark, and disfigure the tree. *Albany, Dec.* 1830.

* The Gardener's Magazine for October, has a communication from John Bowers, recommending summer as having a decided preference. The growth of trees thus pruned, he says, far exceeds that of the winter pruned. He commenced the practice in 1826, when his trees were six feet high; and in the autumn of 1829 they were 20 feet. He has this year summer pruned 100 acres of young plantations, which in August were stated to be remarkably thriving and healthy.

From the New England Farmer.

Expedient Proposed for Increasing Fodddr in the Ensuing Winter.

Whatever may be the fate of our hay crop this season, it seems certain that in general there is little left in our barns from the hay crop of last year; and that many of our farming animals and horses are likely to be brought into a low condition by the scarcity of fodder in the ensuing winter. It will be important therefore, to extend the experiment of *chopping straw*, which promises not to be deficient this year. On some of the stage lines this expedient is said of late to have found more favor than heretofore. We may also use potatoes for our *horses* which is a practice approved of by some in modern times.

But there is another promising article, of which it seems not too late for us to avail ourselves, and which probably has not been thought of with this view.

Indian corn cannot be raised this season with any expectation of *ripening its seed;* but it may be raised for the sake of its *stem, leaf, and parts destined to help its seeding.* There are vacant spots on a farm, (no matter how small,) on which some seeds may be put; but worn out pastures and other fields, *without ultimate material loss to the farmer*, may be turned up by the plough and well harrowed; and then have corn set in them closely, manuring the ground with strewed ashes or plaster of paris. As to hoeing, it will be out of the question, except to remove weeds. Just before the season brings on frosty nights, the *whole of the plant* may be cut up from the roots, and carried off the ground without loss of time from letting it be left out to be turned and dried, since it may be put directly under the cover of our barns, sheds and out-houses, till fit to be stowed closely for regular use. Indian corn seems to be the only article, in our present farming system, which can be subjected to this treatment and advantageously used *before it is ripe for seeding*, (except, perhaps, millet be an exception, an article of which I say nothing, since I know nothing.) Be it observed here, that the stem of the corn comes into use entire, as do also the parts of the plant, including the cob and its unripe seed. Whether the latter articles will prove healthy I know not, but the experiment will probably be tried by no one to a length to produce hazard, where the food is mixed with other food.

The farmer must judge himself what species of corn he will adopt for his experiment, if he approves of the plan. A rich soil may make Virginia white corn answer well, but for other situations, New England corn, down to the six weeks corn, may be proper. The Virginia corn will yield to my own knowledge *a very large crop*, before the time of its ripening. If the experiment in the main should succeed, practice will improve our knowledge against another season.

In a scarce year, cattle should be kept warm, as they then require less food to make them thrive. They should be fed also by *small portions* at a time, to make them eat *the whole* of what is placed before them and digest it. And a little currying will do them no harm.

That something should be tried under present circumstances is evident. Laboring cattle are soon worn down when ill fed: by being *lean* also, they lose not only much of their speed and strength, but of their momentum, (or effect in consequence of their being more full of flesh and weight,) in drawing, and they and their drivers get into bad habits, when they call much for the whip or goad stick. Cows and sheep and young animals (especially the latter) suffer much when food is scanty, as does also the manure yard. *Sat verbum.* EMERITUS.

By the Editor.—The foregoing hints are worth the attention of all farmers whether their hay crop is or is not likely to come in short of their anticipation. We believe that more food for cattle can be raised on a given quantity of ground, and with less labor and expense when properly seeded and cultivated with corn, than when almost any other vegetable is chosen for that purpose.

COMMUNICATIONS.

The Cut Worm.

BY M.

Although all insect life, in the worm or maggot state, is more tenacious of existence than in any other, the cut worm deserves a high rank in the class of invincibles. In seeking for a destructive or preventive agent, a broad ring of mercurial ointment was first tried, as a boundary or barrier to their motion. This was passed with great precipitancy, and even tasted with apparent indifference. In the same manner a number were surrounded alternately with a solution of oxygen, muriate of mercury, oil of vitriol, aqua-fortis, japan varnish, spirits of turpentine, and spirit gas, most of which were first tasted by the worms, and then heedlessly forded. A little oil of vitriol was applied to the head of one, which he seemed to dislike when it came to his mouth, but was unharmed by its action. Nitric acid was applied in the same manner and with the same result. A number were immersed in a saturated solution of corrosive sublimate, which caused them to disgorge the green contents of their stomachs, and to writhe for a time as though in a dying state. When their motions had ceased, they were removed from the bath, and in one minute were fully resuscitated, and scud away as fast as possible. Some fresh ones were next dropped into sulphuric acid, (oil of vitriol,) which caused also a disgorgement and writhing violently for a shorter space. On its ceasing they were removed, and lay as many insects that feign death when disturbed, or think themselves observed. From this condition they suddenly started into life, and scampered away as if nothing had happened. The conclusion was irresistible, that however vigorous transpiration might be, the imbibing power was wanting or obedient to their will. None of the alkalies were tried, but the idea was suggested that their spiraculi may be closed with an oily substance, and these would remove it and destroy them. But after the above experiments, we had little hope of finding an antidote in the apothecary shop. Like the curculio, this enemy requires mechanical and not chemical warfare for its destruction.

In despair of finding out a remedy for their ravages, the owner of a young nursery of some thousands of trees in this city, when all the budding and grafting was threatened with destruction by their seizing the tender buds when they first gave signs that the budding was successful, he was induced to carry a few to the poultry yard. The avidity with which they were devoured, left no doubt of their being a perfect desert for fowls. Accordingly they were invited, together with all of his neighbors', to a banquet in the nursery. A few worms placed beside the stocks for a bait were first picked up, and as is their wont, more were immediately sought by scratching where the first were found. This operation succeeding to the extent of their inclinations, the whole tribe immediately became hunters of the cut worm, and very little experience pointed the proper places and necessary depth beyond which they found it useless to scratch. The number eat by each fowl it were useless to calculate, but with crops distended nearly to bursting, they were withdrawn for fear of bad consequences to themselves. No mortality to the fowls followed, and they were subsequently introduced a few times, till their scratching mania threatened the entire destruction of the nursery, which was planted but the year before. They however accomplished a great work in a short space, and have recommended their species for this useful work. M.

Description of a Mound,

Recently discovered on the Bank of the Genesee river.

BY WILLIAM B. MUNSON.

Mr. Tucker—If the antiquities of the country are of interest to the agriculturist, I send you for publication in the Farmer, the following description of an ancient mound, lately found on the banks of the Genesee river in clearing the land for a crop of wheat.

The mound is about 90 feet in circumference, 30 feet diameter, and 8 feet in height. It is in the center of a flat piece of ground of about 6 rods square, bounded on the north by a ravine 150 feet deep, perpendicular banks, on the east by gently rising ground, on the south by another ravine, equal to the one on the north in depth; on the west the river banks descend precipitously to the river about 300 feet. It is situate nearly opposite the late residence of Mary Jamieson, the "*White Woman.*" The site is truly romantic, and the prospect the most beautiful that can be imagined, commanding an extensive view up and down the Genesee river, and over the Gardow flats, with parts of the towns of Castile and Perry, and which would be much increased if the woods were more cleared away. On making an excavation into the mound, a skeleton was discovered, with the head placed to the center, lying on the back, the head resting on a flat stone, the arms folded across the breast, and the feet extending towards the circumference of the mound; large round stones of from 40 to 80 lbs. weight were placed on each side of the skeleton, and over these and the skeleton were placed flat stones. The bones were in a very decayed state, and would not preserve their form when exposed to the air. Parts of three skeletons were discovered in about one eighth of the whole mound, or the section in which the excavation was made.

Over one of the skeletons was placed 26 arrow heads, one stone knife, and a stone cleaver; also a copper skewer, of about 6 or 7 inches in length, about the size of a pipe's tail, flattened a little at one end, and slightly twisted. The stone knife is of very fine hard stone, clouded green, 3 or 4 inches in breadth, and about 7 in length, with a small hole in the middle, about the thickness of a half quire of paper, sharpened edges. The cleaver of about the same dimensions as the knife, cut off square, and several notches made on one end; a hole in the middle. This is of soft slate stone. The pipe bowl was made of coarse sand stone, about an inch square, and rudely ornamented by rubbing notches on the upper edge of the bowls.

All the articles are of the rudest workmanship. Even the arrow heads were the rudest that can be found, and seem to have been made when the skill of making arrow heads was yet in its infancy. Large trees were found standing on the mound. These relics may be seen at the store of D. & T. Aylsworth, on the River Road, in Mt. Morris. Respectfully yours, etc.,

William B. Munson.

Brooks Grove, Livingston co. N. Y.
July 14th, 1835.

From the Cultivator.

Budding.

The effect of propagating choice fruit upon a farmer's premises is, figuratively, to grow the rose where only grew the thorn, and literally, to provide for one's family and friends, some of the choicest luxuries of life; and these luxuries far surpass those of a like kind which are purchased with money, because upon one's own trees, they may be permitted to attain their highest perfection, and because they are rendered more endearing by the personal care and labor which we bestow on their culture.

We now proceed, agreeable to our promise in the 2d No. of the Cultivator, to describe the mode of propagation by budding. This mode has several advantages over grafting. It is more readily performed, with fewer implements, less preparation, and with greater success; it does not injure the stock if successful, and the operation may be twice or thrice repeated the same year, as the season for its performance is protracted, for some one or other of the varieties, for some three months. Although July and August constitute the ordinary season for budding, the plum and the cherry may often be budded in the latter part of June, and the peach, apricot and nectarine as late as the middle of Sept. Youth may readily acquire the art, by a little practice, under the directions we are about to give; and we know a young lady who is an adept in it, and who practices it annually as a pleasant recreation, as well as a useful labor. We have often been treated with delicious peaches produced from the buds which she had inserted.

The first consideration is to provide stalks, if this provision has not already been made. Seeds may be collected the coming season, in almost every family. Those of stone fruit may be mixed with earth, or deposited in a hole in the garden, and in autumn buried superficially in the earth, to expose them to the expanding influence of the frost; and in the spring those of the peach and plum that have not burst the shell should be cracked, and the whole sown in a well prepared seed bed. The cherries may be sown immediately after they are taken from the fruit, and the apple, pear and quince either in autumn or spring. All the kinds will generally grow the first season. If transplanted in June, and well treated, the peach will do to bud in September following, and the others in two and three years, if put into nursery rows, three feet apart, and a foot distant in the rows, and well taken care of. The same rule applies to plants as to animals: the better condition they are kept in while young, the more profitable they will become at maturity. Thus two or three roods of ground will suffice a farmer for a nursery of choice fruit, from which he may replenish his orchard and his garden at pleasure, and readily appropriate to his use every new variety which comes under his observation. No one will regret the trifling labor and attention which he has bestowed upon a little plantation of this kind, after he has begun to realize the fruits of it. Ornamental shrubs and trees, to embellish

the grounds about his buildings, may be added without cost, and with trifling labor.

A bud is an organized plant in embryo, with roots, branches and foliage, and like a seed possesses individual vitality, capable of development and the reproduction of its species. The process of budding is the transferring this embryo plant from its parent tree to another tree, which must at least be of the same genus, if not of the same species. The apricot and nectarine may be, and generally are, budded upon the peach; the plum and the peach are budded on each other, and the pear and apple may be worked on the wild crab and hawthorn,—and the former is put on the quince to produce dwarf trees. To render the transfer or budding successful, three things are requisite: 1, That the bud be in a proper condition to transfer; 2, that the stock be in a condition to receive and nourish it; and 3, that the transfer be skilfully made. The bud ought to be matured, i. e. of full growth, and yet not so hard and firm as to cause injury in separating it from its parent. The stock must peel freely, as this is necessary for the insertion of the bud, and indicates the presence of what is termed the cambium, which is the soft partially formed woody matter which underlays the bark, which will ripen into indurated wood,—is the source of nourishment to the bud, and the bond of union between it and the stock. The operator must use precaution that he injures neither the bud, the bark, nor the cambium, as these all exercise important offices in effecting the union; and he must withal take care to apply his ligatures properly. It will be seen from these remarks, that both the stock and the graft should be in a state of active growth, and the more vigorous the better, when the budding process is performed. It is also preferable to bud when the weather is cloudy, but not wet. Twigs for budding may be preserved for many days with care. They should be immediately divested of their leaves, but not wholly of their leaf-stocks or petiolcs, to prevent the exhaustion of moisture, and may then be wrapped in fresh grass, wet cloths, or with their but ends preserved in moisture.

The only implement necessary is a budding knife, (fig. 1,) and the only prepartion some bass matting, or the inner bark of the basswood or linden.

Fig. 1.

Professor Thouin enumerates twenty species or varieties of grafting, most of which are only practiced by amateurs and professional gardeners. We shall describe only the common mode, which is in general practice in nurseries. We take it from the Encyclopedia of Gardening.

Shield-budding, or T budding, is thus performed:—Fix on a smooth part of the side of the stock, rather from than towards the sun, and of a height depending, as in grafting, on whether dwarf, half, or whole standard trees are desired; then, with the budding knife, make a horizontal cut across the rind, quite through to the firm wood; from the middle of this transverse cut, make a slit downward, perpendicularly, an inch or more long, going also quite through to the wood. This done, proceed with all expedition to take off a bud; holding the cutting, or scion, in one hand, with the thickest end outward, and with the knife in the other hand, enter it about half an inch or more below a bud, cutting nearly half way into the wood of the shoot, continuing it with one clear slanting cut, about half an inch or more above the bud, so deep as to take a part of the wood along with it, the whole about an inch and a half long; (*a* fig. 2) then directly with the thumb and finger, or point of the knife, clip off the woody part remaining to the bud; which done, observe whether the eye or germ of the bud remains perfect; if not, and a little hole appears in that part, it is improper, or as gardeners express it, the bud has lost its root, and another must be prepared. This done, placing the back part of the bud or shield between your lips, expeditiously with the flat haft of the knife separate the back of the stock on each side of the perpendicular cut, clear to the wood (*c*), for the admission of the bud, which directly slip down, close between the wood and bark, to the bottom of the slit,(*d*.) The next operation is to cut off the top part of the shield (*b*), even with the horizontal first made cut, in order to let it completely into its place, and to join exactly the upper edge of the shield with the transverse cut, that the descending sap may immediately enter the back of the shield, and protrude granulated matter between it and the wood, so as to effect a living union. The parts are now to be immediately bound round with a ligament of fresh bass (*e*), previously soaked in water, to render it pliable and tough, beginning a little below the bottom of the perpendicular slit, proceeding upward closely round every part, except just round the eye of the bud, and continue it a little above the horizontal cut, not too tight, but just sufficient to keep the whole close, and exclude the air, sun and wet.

Fig. 2.

Future Treatment.—In a fortnight at farthest after budding, such as have adhered may be known by their fresh appearance at the eye; and in three weeks all those which have succeeded will be firmly united with the stock, and the parts being somewhat swelled in some species, the bandage must be loosened, and a week or two afterwards finally removed. The shield and bud now swell in common with the other parts of the stock; and nothing more requires to be done till spring, when, jnst before the rising of the sap, they are to be headed down close to the bud, by an oblique cut, terminating about an eighth or quarter of an inch above the shield. In some cases, however, as in grafting, a few inches of the stalk is left for the first season, and the young shoot tied to it for protection from the winds."

From the Farmer's Register.

On the Proper Management of

POSTS, WITH REFERENCE TO THEIR DURABILITY.

Perhaps there is no subject connected with agriculture, on which a greater diversity of opinion prevails than the question, whether, with reference to their durability, posts should be put in the ground green, or seasoned? When I first settled, I took considerable pains to inform myself on this point, by consultation with those whose experience should constitute them proper fountains of information. The diversity to which I have alluded, impaired greatly the acquisition of decisive results. Mr. Thomas Thweatt, of Dinwiddie, (a gentleman of great judgment and observation on all agricultural subjects,) related to me a circumstance which contributed much towards the attainment of my object. He stated, (if my memory be correct,) that in the erection of his garden—a number of posts as he supposed, were prepared and suffered to remain until they were thoroughly seasoned. Its completion, however, required one in addition, which was taken from an adjacent tree, and immediately put in the ground. Seventeen years had elapsed, and every post had rotted down except that one, which remained sound. In the progress of my investigation another instance was related in which an entire side of a garden exhibited the same results. My own limited experience furnishes an incident worthy of being mentioned. My garden enclosure was erected of posts while green. Several pieces remained exposed until they were completely seasoned. Out of these a horse-rack was constructed, which was entirely rotted down, while every post in the garden remains firm. From these facts I deduce the belief, that a post planted when green will last longer than one previously seasoned; and for the reason, that the operation of seasoning produces cracks in the timber, which admitting the moisture from the ground, cause its decay. I recollect to have read the account of an experiment, proving that the inversion of posts, from the direction in which they grew, operated beneficially. Two gate posts were hewn from the same tree—one was planted in the manner in which in which it grew, the other inverted. The former rotted down while the latter was sound. It was accounted for in this way—that nature had formed valves for the *ascension* of the sap, which allowed the moisture from the ground to penetrate through the same channel; but that the inversion of these valves, interposed a barrier to its admission. This theory corroborates the idea previously expressed, that the moisture of the ground, alternately penetrating within the timber and in drouths, measurably receding, causes its decay. Whether the posts should be cut while the sap is up or down, I am unable to determine. A writer in some of the numbers of the American Farmer, states that oak timber should be cut while the sap is up, because it is glutinous and forms a cement, or substance which acts as a preservative.

I have ventured to express these hasty and imperfect reflections, with the hope that, although they may not impart any useful information, they may elicit some from others. These are controverted subjects, in which every person who erects a gate or encloses a garden is deeply interested—and their further discussion will be valuable, at least to S.

On Irrigating Gardens by Tanks

OR PONDS.

The garden of Thomas A. Knight, Esq. is supplied with water by springs, which rise in a more elevated situation, and thus afford him the means of making a small pond, from which he can cause water to flow over every part of the garden whenever he wishes. He thus irrigates his strawberry beds when in flower, and plants of other kinds, throughout the summer. A stream is caused to flow down the rows of celery, brocoli, &c. with very great advantage. But the most extensive and beneficial use made of it, is to water his late crop of peas. By this means the ill effects of mildew are almost wholly prevented, and the result is a good supply of peas throughout October. When water is delivered in the usual quantity from a watering pot, its effects for a short time are almost always beneficial; but if water be not continued regularly, injurious consequences frequently follow; for the roots of plants extend themselves most rapidly, wherever they find moisture and food; and if the surface alone be wetted, the roots extend themselves only superficially, and the plants consequently become more subject to injury from drouth, than they

would have been if no water had been given to them. When, on the contrary, the soil is irrigated in the manner above recommended, it is wetted to a great depth; and a single watering, once in eight or ten days, is, in almost all cases, fully sufficient.—*Trans. Hort. Soc., Part 4, Hort. Reg.*

On Fatting Sheep and Lambs.

The subject of fattening sheep may be considered with regard to the age at which fatting is commenced, the kind of food and the manner of suppling it.

The age at which sheep are fatted depends upon the breed, some breeds, such as the Leicester, maturing at an earlier age than others, under the same circumstances; and also in the abundance and quality of the food on which they are reared; a disposition to early obesity, as well as a gradual tendency towards the form which indicates a propensity to fatten, being materially promoted by rich food, while the young animals are yet in a growing state. On good land, the Leicester weathers are very generally brought to a profitable state of fatness before they are eighteen months old, and are seldom kept for fatting beyond the age of two years; the Highland breeds, on the other hand, though prepared, by means of turneps, a year at least sooner than they could in former times, usually go to the shambles when from three to four years old. The ewes of the first description are commonly fatted after having brought their lambs for three seasons, that is, after they have compled their fourth year,and those of the small breeds at from five to seven years of age, according to circumstances.

The kinds of food on which sheep are fatted, are good pastures, permanent or temporary, herbage crops, as clovers, tares, &c. turneps and other roots; and linseed cake, grains, or other edible refuse of the oil manufactory, brewery and distillery.

As *a general rule for fattening sheep*, as well as other animals, it should be made a rule never to allow them to lose flesh from the earliest age, till they are sent to the butcher; that it is found of much advantage with a view to speedy fattening, as well as to the economy of food, to separate a flock into divisions, corresponding with its different ages, and the purpose of the owner as to the time of carrying them to market; and that the change from the food of store to fatting stock, from that which is barely capable of supporting the condition which they have already attained, to that which is adapted to their speedy improvement in fatting, ought to be gradual and progressive. Thus, very lean sheep are never, in good management, put to full turneps in winter, nor to rich pastures in summer; they are prepared for turneps in good grass land; often on the after-grass of mown grounds, and kept on second year's leys, and afterwards on a moderate allowance of turneps, if they are fatted on pastures. It is a common practice, in the instance of the Leicesters, to keep all that are not meant for breeding always in a state of fatness, and after full feeding on turneps through winter and spring, to finish them on the first year's clover early in summer, when the prices of meat are usually the highest.

The fattening of lambs during summer, requires nothing more than keeping their mothers and them on the richest and best pasturage, and supplying such artificial food as the situation, season, and other circumstances may require; but the fatting of lambs during winter and spring, requires attention to three things, the breed, or if any breed be used indifferently, the period of dropping, the lamb house, and the feeding.

With respect to the breed, as the sheep will take the ram at any season, any variety may be so managed as to drop their lambs at any period of the year, but it is found by experience, that the Dorsetshire sheep is easiest made to yean, and this is the sort generally employed in Middlesex for rearing what is called house lamb, for the metropolis. The selection of rams for breeding the lambs to be house fed, is, according to Middleton, founded on the following circumstances: the sucklers, salesmen, and butchers of London, are aware that such lambs as have sharp barbs on the inside of their lips, are certainly of a deep color after being butchered; and all those whose barbs are naturally blunt, do as certainly produce fair meat. This knowledge has been the occasion of many lambs of the latter kind being kept for rams, and sent into Dorsetshire expressly for the purpose of improving the color of the flesh of house lambs; the issue of such rams can generally be warranted fair, and such meat always sells at a higher price; hence arose the mistaken notion that Middlesex rams were necessary to procure house lambs.

The economy of the suckling-house is as follows: The sheep which begin to lamb about Michaelmas are kept in the close during the day, and in the house during the night, until they have produced twenty or thirty lambs. These lambs are then put into a lamb-house which is kept constantly well littered with clean wheat straw; and chalk, both in lump and in powder, is provided for them to lick, in order to prevent looseness, and thereby preserve the lambs in health. As a prevention against gnawing the boards, or eating each other's wool, a little wheat straw is placed, with the ears downwards, in a rack within their reach, with which they amuse themselves, and of which they eat a small quantity. In this house they are kept, with great care and attention, until fit for the butcher.

The mothers of the lambs are turned, every night at eight o'clock, into the lamb-house to their offspring. At six o'clock in the morning, these mothers are separated from their lambs, and turned into the pastures; and at eight o'clock, such ewes as have lost their own lambs, and those ewes whose lambs are sold, are brought in and held by the head till the lambs, by turns, suck them clean: they are then turned into the pasture; at twelve o'clock, the mothers of the lambs are driven from the pasture into the lamb-house for an hour, in the course of which time each lamb is sucked by its mother. At four o'clock, all the ewes that have not lambs of their own are again brought to the lamb-house, and held for the lambs to suck; and at night the mothers of the lambs are brought to them for the night.

This method of suckling is continued all the year. The breeders select such of the lambs as become fat enough, and of proper age, (about eight weeks old,) for slaughter, and send them to markets during December, and three or four succeeding months, at prices which vary from one guinea to four, and the rest of the year at about two guineas each. This is severe work for the ewes, and some of them die under excess of exhaustion. However, care is taken that they have plenty of food; for when green food (viz. turneps, cole, rye, tares, clover, &c.) begins to fail, brewer's grains are given them in troughs, and second-crop hay in racks, as well to support the ewes, as to supply the lambs with plenty of milk; for, if that should not be abundant, the lambs would become stunted, in which case no food could fatten them.—*Ency. of Agri.*

Mowing Machine.

We have seen at the shop of Mr. Johnson, in Cherry street, a mowing machine, which we are told is the first of the kind built in this country. The cutting operation is performed by circular knives fastened upon the periphery of a horizontal wheel five feet in diameter. This wheel is suspended upon a perpendicular iron shaft, which hangs upon a lever, by which the knives are raised or lowered at the pleasure of the driver to suit any unevenness in the ground. The motion is given by geering, connected with the wheels, on which the whole machine rests. The machine will weigh a ton, and is moved by two horses. Upon the horizontal wheel, and just within the edge of the knives, is a tub of light wood, which has the effect of carrying the mown grass into a swath. We see not but that the machine will work well on smooth land, but where there are rocks or much unevenness it cannot. It is said to be capable of mowing ten acres a day, and certainly, for the mower, it is much easier to ride on this machine, than to swing a common scythe. The machine was invented in England, but the laborers there, probably under the guide of some philanthropic leader, made war upon it, and would never permit it to be used in peace.—*N. Y. Jour. of Com.*

From the Fruit Cultivator.

Soils Suitable for Apple Trees.

Mr. Knight's Opinion of Grafted Trees Erroneous.

Deep rich soils, in sheltered situations, are not the most proper for the apple, though such have been most erroneously recommended by writers who ought to have known better. For it is often seen that apple trees succeed well in any kind of loam,though it be not more than one foot in depth, so as the bottom is sound and dry; the roots take an extensive horizontal range, the young wood is always of more moderate growth, and better ripened than where roots strike deep into the ground.

The golden pippin being one of our most useful and esteemed hardy fruits, the author trusts he will be forgiven for entering more at large into its history and management than he has thought necessary in the preceding notices of other inferior kinds of apples, especially as there has been, for several years past, an idea prevalent, that this country was about to lose this fine fruit forever. In Mr. Knight's *Treatise on Orchard Fruit*, the doctrine was first broached, that all our varieties and sub-varieties of fruits have but a temporary existence. They are raised from seed, to flourish for an uncertain number of years, and, after arriving at their maximum of health and fertility, gradually sink to decay, and at length disappear. Taking this idea as a rule, the golden pippin was judged to be in this last stage of existence; and it was predicted, that not only were the old full grown trees to disappear, but all the young ones, lately worked from them, would perish also. It must be admitted, that a great majority of the old golden pippen trees in Herefordshire, and in other parts of the kingdom, were, about the time Mr. Knight wrote this treatise, in an apparent state of decay; and moreover, that young trees of the same sort could but with difficulty be made to grow and bear so freely as they had previously done. These failures, however, were accounted for in another way than that propounded by Mr. Knight. It was observed, that the old trees, having probably all been planted about the same time, and having arrived at their natural period of healthy existence, were like all other trees, falling to decay from sheer old age; and that the contemporaneous weakness and debility of the young lately planted trees were caused by a careless choice of grafts, by working them on improper stocks, and planting them in old worn out soil, instead of in fresh, well trenched, light, loamy situations. This latter opinion was the more feasible, because there were many middle aged trees in different parts of the kingdom, which were in full vigor and bearing; and though young plants planted in old gardens and orchards were unthrifty, such as were properly planted in newly broken up ground, provided they were worked on the best crab stocks, succeeded as well ever.

This being the opinion of the author respecting the failure of the old golden pippin, and all other sorts of apples, he gave the subject his best consideration, and set about providing how far his own conjectures were well or ill founded; and, after the experience of forty years, he has come to the following conclusion, viz: that of crab stocks he raised from the most healthy wild trees, properly treated, and planted out in the nursery, and worked with the most healthy and moderate sized scions, cut from the top of sound healthy trees, and, when fit for final transplantation, he placed on well trenched light fresh loam, having a dry bottom of rock or chalk, the trees will assuredly prosper without fear of disappointment. On the other hand, if the graft be taken indiscriminately from any tree, or from any part of a tree, and placed either on free or paradise stocks, the young trees so raised will, nine times out of twelve, be in some respect or other defective; and particularly if they be not afterwards

planted in their favorite soil, where their wood would not be sufficiently ripened.

The golden pippin requires a dry and moderately warm climate. The best fruit are produced in Normandy on the continent, in Sussex in England, and on walls in Scotland. The south of France is too warm, and the richer counties of England and Ireland are too moist. This apple is supposed to have been first raised at Parham Park, on the Southdowns of Sussex.

It has been noticed of late years, that neither the golden pippin nor Nonpareil keep so well as formerly. The author well remembers, that, sixty years ago, both these kinds of apples were plentiful in May; but it is not so at present. This is attributed to two causes; our summers lately being more moist, and perhaps too many free and paradise stocks used in their nurseries. It has been deemed a good practice to raise the golden pippin from cuttings or layers This plan is quite practicable; and some practitioners have been very successful in raising plants from cuttings, intended for potting. Trees may also be raised by layers from stools kept on purpose in the nursery.

From the Farmer and Gardener.

The Cut Worm---A Remedy.

Dear Sir—Having heard much said respecting the depredations committed on the corn crop, by the *cut worm*, I am induced to offer a few reflections, for the benefit of those who may not be aware of a simple remedy, and one within the reach of all, whose prejudice of education does not prohibit a trial of the experiment. It is a fact well known to all conversant with agriculture, that this worm is more or less destructive to corn, cabbage, vines, &c. every season: and at the time of preparing the ground for corn, numbers of them may be discovered, thereby showing to the farmer the possibility of an attack upon his intended crop. Hence I conceive it would be wisdom in him to reflect upon, and avail himself of, the best method to get rid of them. Experience has shown me that in those fields which have been entirely cleansed of all vegetable matter, preparatory to planting, the worms have blighted the hopes of the farmer, while in those fields which have been broken up in the fall, and which, of course, were in some measure overgrown with grass by planting time, had almost entirely escaped.

The reason of this is obvious to every man of reflection. If the worm is an inhabitant of the ground in which the planter intends to deposit his grain, and if the field is entirely deprived of vegetation upon which it may subsist, exclusively of the growing corn, it must of necessity feed on that, and it is therefore but to be expected, that its ravages will be great. There are, I am aware, certain locations, where it would not be expedient to break up the ground in the fall. But I feel convinced in my own mind, that if farmers generally were to leave a sufficient quantity of vegetable matter in their fields, they would find it to their interest. If those persons who are in the habit of listing their ground, would leave the middle until the corn had grown beyond the power of the worm to injure it, they would no doubt obviate the necessity of replanting beyond a very limited extent. The corn which is planted on the list is quite as easy of cultivation, and derives the necessary sustenance, as much from the decomposition of the vegetable matter enclosed in it, as it would if the whole were broken up previously to planting. These two methods, I believe, are all that are observed in the preparation of the ground before planting; and if any should think these suggestions worthy of a trial, they will no doubt be fully compensated, or at least find they have guarded against the devastating effects of the cut worm.

A Practical Farmer.

American Champaigne.—The vine appears to be successfully cultivated for wine in the vicinity of Baltimore. Mr. G. Fitzhugh writes to the American that about 20,000 vines, principally the Herbemont, Lenoir, Catawba, Bland, and Isabella, all natives, have been planted within the last four years. The American also acknowledges the present of a bottle of sparkling Herbemont, made in August, 1832, which "resembles Champaigne in color, flavor, and briskness, and is superior to much that is sold under the fascinating name of the French favorite." It is declared to be the pure juice of the native grape. The Burgundy and Champaigne districts of France are about latitude 47 and 48.

Fattening Hogs on Apples.

Mr. E. Holmes—In my communication of 1834 I described my mode of fattening swine upon apples. I will now state the result of my experiment. I last year fattened an old hog and two pigs, upon apples, upon 14 bushels of oats and pea meal, and 1 bushel of Indian meal only. I began to feed them about the tenth of the 8th month, and they were in rather poor condition. I fed the pigs about 3 months, and they weighed at 7 months old, 113 and 125. The hog I fatted about 4 months, and when he was about 19 months old he weighed 415, and leaves weighed 34 lbs 10 oz. Paine Wingate.

Remarks.—Our readers no doubt recollect Mr. Wingate's statements of his experiment in fattening hogs with apples last year. If not, they will find them in vol. 2d, No. 27 of the Maine Farmer.

Mr. Wingate is a practical farmer—is one of the society of Friends, and like most of that highly respectable class, an exact observer of things. According to some of his experiments, he concludes that the fattening of hogs in our section of the country, unless a person has slops, apples, and such cheap food to give them, is a money losing business—or in other words, keeping hogs upon corn and potatoes alone, will bring your pork to about ten cents per lb., whereas if you have an abundance of slops, and food of that kind, it will reduce the cost of pork to a much less sum, and make it much more profitable. Mr. W. brought us a piece of the hog mentioned above, and fattened as he described in a former paper. It was of as good a flavor and of as solid a texture as any pork we ever saw. In the thickest part it measured 5 inches of clear fat. Communities are slow in changing their habits and opinions, and especially farmers. Many even now, notwithstanding the experiments which have been tried by acute and observing men, will not believe that apples were made for any thing but apple sauce and cider. And many very worthy men have resisted the march of the Temperance cause because they would have to sacrifice their orchards. And others in their zeal to do away the evils of excessive drinking, have actually cut down their trees. Now we say the more orchards, other things equal, the better.

Apples are as valuable for stock, and even more so, as for men. Sheep like them. Cattle will fatten upon them, and pork can be made more expeditiously and economically by them; and we would therefore say to all farmers, if you have a good orchard, take care of it—if you have a poor one, make it better—if you have none at all, set out one as soon as possible.—*Maine Far.*

Cocoons.—On Wednesday last we saw some cocoons more remarkable for weight than any we ever saw before. They weighed at the rate of 150 to 160 to the pound; while the usual allowance is 250 to the pound. They were made by worms belonging to Mr. Amos Benjamin, of Bristol, in this county, and the worms were fed with the leaves of the white mulberry. Mr. B. has heretofore lived in Scipio, in Cayuga county, where he paid some attention to this subject, and he has also seen a good deal of the management of silk worms and their produce, in Connecticut, his native state; but he thinks the leaf of the mulberry, as it grows in Bristol valley, yields more pabulum for the worm, and more material for silk, than any he has elsewhere known. Mr. B. intends to reel his own cocoons, and make them into sewing thread. We are glad to see the rapid spread of attention to this important species of production.—*Ont. Rep.*

The *Silk Cocoonery* of Mr. Samuel Whitmarsh of this town is now in full operation. It is two hundred feet in length, and two stories in height. It is filled with ranges of sliding draws of twine lattice work, upon which the worms feed, and these are intersected by alleys, so that the building has fresh air and light. It is capable of feeding four or five millions of worms. At the present time he has but about eight hundred thousand. He has them in all the various stages, just out of the egg, to the winding the cocoons.

It is curious enough to see the almost invisible little worms just from the egg, less than half the size of a pin head. To notice their expansion each successive day, more than doubling themselves in size, and increasing in a few weeks from the mere mite to the dimensions of a three inch corpulent caterpillar. Then to notice their habits and instinct and way of taking their food, eating in a continued half circle upon the leaf until it is all devoured. Again the preparation for winding itself up in the cocoon, attaching its two extremities to some object, and then throwing out its threads in every direction until it excludes itself from sight. It thus erects its own tomb and encloses itself within its own bosom.

Mr. Whitmarsh does not feed his worms at present upon the Chinese mulberry. The plant is yet rare, and the growers are anxious to multiply them, by laying down all the shoots. From the great number under cultivation by various gentlemen in this town, and the care taken to increase them, there is reason to believe the supply will be adequate to all demands next spring. Mr. Whitmarsh has some trees three or four feet in height, which withstood the severity of last winter unharmed. On some of these trees the berry is now found, and great care will be taken to preserve the seed, so that the precise character of the plant propagated from them may be accurately known.—*Northampton Cour.*

☞ List of Payments next week.

Mulberry Seed.

JUST received at the Rochester Seed Store, a quantity of new *White Italian Mulberry Seed*, gathered within the last three weeks.

As this is a good season of the year for sowing the seed, persons desirous of commencing the silk business, or increasing their present stock, will do well to obtain some of this seed, which we know is perfectly new. REYNOLDS & BATEHAM.

Rochester, July 25, 1835.

Turnep Seed.

FOR sale at the Rochester Seed Store, Turnep Seed of almost every variety.

Every farmer will do well to put in a good patch of turneps, as the past season has shown the necessity of having a good supply of this kind of fodder, to carry his stock advantageously through a long cold winter. REYNOLDS & BATEHAM.

Rochester, July 25, 1835.

The Silk Culturist, & Farmer's MANUAL.

"THE object of this publication is to disseminate a thorough knowledge of the cultivation of the Mulberry Tree in all its varieties, the rearing of Silk Worms, the production of Cocoons, and the reeling of silk in the most approved method."

It will also contain interesting matter on Agricultural subjects generally.

Published monthly at Hartford, Conn., by the Hartford County Silk Society, at 50 cents per year, in advance. Subscriptions received at the Rochester Seed Store, by

july 25 REYNOLDS & BATEHAM.

A Valuable Farm for Sale.

ON the Ridge Road, south side, two miles from the canal, in the town of Murray, Orleans county, upwards of 200 acres, 130 highly cultivated, about 100 acres wheat now in the ground, besides oats, corn, potatoes, &c.—buildings large and convenient. This is desirable property, being situated on the best road in this state,—the soil varied, and every variety of the richest kind. The situation too is delightful. Price moderate—terms easy. Inquire on the premises of W. B. ILES.

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Reflection.

"A soul without reflection
Like a pile without inhabitant,
To ruin runs."

It is good for man occasionally to withdraw himself from the bustle of business and turmoil of life for the purpose of reflection, like the surveyor who, after having taken the angles and measured the sides of the field, retires to compute the area and to give his work a durable form in a profile or map. Reflection is a kind of mapping by which the observations hurriedly made are assorted and properly arranged, and our errors, if any are made, detected and corrected, thereby enabling us to resume our business with a perfect comprehension of it. Nature, in bestowing this power on man, made it not only necessary to his guidance in the varied relations of social life, but combined with the exercise of it, his highest moral felicity. It is the banquet of the mind—the corrector of its disorders—the great panacea or elixir of life. What can equal the chastened serenity that steals over a mind given up to reflection, and desirous of correcting the errors of the past by avoiding them in future? "Ponder the paths of your feet," is the injunction of wisdom, and he that gives heed thereto shall not "make haste." What would the exercise of reflection not do? It would detach the libertine from his haunts of vice—the tipler from the maddening bowl—the thief from his larcenies—the profane from his cursings—the hypocrite from his deceptions—the enthusiast from his rhapsodies—the backbiter from his slanders—the passionate from his storms of wrath—the murderer from his slaughter, and man from his vices. But destitute of this ennobling faculty, what is man? A frail bark on a tempestuous sea, the sport of the heaving flood. Now borne aloft on the fleecy crest of a broken wave, and anon buried in the caverns of the deep. How surely, "like a pile without inhabitant" does he "run to ruin." The great orator of Greece being inquired of, what was the first requisite in good oratory, sententiously replied, "*action.*" On the second requisite being demanded, the reply still was *action*, and so of the third. So if we were asked what is the first requisite on setting out in life, we would reply *reflection.* If what was best for middle age, we would reply *reflection*, and for old age the same, so that what action was in the oratory of Demosthenes, reflection should be in our journey through life. Reflection, properly considered, implies not only the detection of our faults, but also, the forsaking of them—in fine it implies the avoidance of all evil and the practice of every virtue. To all therefore we would recommend reflection, but more especially to Editors, many of whom often give unwelcome evidence of their lapsed state, and want of this indispensable attribute.—*Rochester Daily Advertiser.*

Farmers and Mechanics.

Miss Sedgwick has just issued a new work from the press of Messrs. Monroe & Co. of Boston, entitled "Home," and dedicated to the farmers and Mechanics. The sentiment conveyed in the following appropriate language, is no less just than true. One of her characters charges his neighbor with the intention of educating his sons for the learned professions, and his daughters for the wives of professional gentlemen, to which the latter thus sensibly replies:

"I shall be governed by circumstances; I do not intend or wish, Anthon, to crowd my boys in to the learned professions. If any among them have a particular talent or taste for them, they may follow them. They must decide for themselves in a matter more important to them than any one else. But my boys know that I should be mortified if they selected these professions from the vulgar notion that they were more genteel—a vulgar word that ought to be banished from an American vocabulary—more genteel than agriculture, or the mechanic arts. I have labored hard to convince my boys that there is nothing vulgar in the mechanic professions—no particular reason for envying the lawyer or the doctor. They, as much as the farmer and mechanic, are working men.—And I should like to know what there is particularly elevating in sitting over a table and writing prescribed forms, or in enquiring into the particulars of diseases and doling out physic for them. It is certainly a false notion in a democratic republic, that a lawyer has any higher claim to respectability—gentility, if you please—than a tanner, a goldsmith, a painter, or a builder. It is a fault of the mechanic, if he takes a place not assigned to him by the government and institutions of his country. He is of the *lower orders* only when he is self-degraded by the ignorance and coarse manners, which are associated with manual labor in countries where society is divided into *castes*, and have therefore come to be considered inseparable from it. Rely upon it, it is not so. The old barriers are down. The time has come when 'being mechanics,' we may appear on 'laboring days' as well as holy days, without the 'sign of our profession.' Talent and worth are the only eternal grounds of distinction. To these the Almighty has affixed his everlasting patent of nobility, and these it is which make bright 'the immortal names' to which our children may aspire as well as others. It will be our own fault, Anthon, if, in our land, society as well as government is not organized upon a new foundation. But we must secure by our efforts, the elevations that are now accessible to all. There is nothing that tends more to the separation into classes than difference of manners."

Anecdotes of Animals.

From Jessie's Gleanings in Natural History.

A Sentimental Pigeon.—A man, set to watch a field of Peas which had been much preyed upon by pigeons, shot an old cock pigeon who had long been an inhabitant of the farm. His mate around whom he had for many a year cooed, and nourished from his own crop, and assisted in rearing numerous young ones, immediately settled on the ground by its side, and showed her grief in the most expressive manner. The laborer took up the dead bird, and tied it to a short stake, thinking that it would frighten away the other depredators. In this situation, however, his partner did not forsake him, but continued day after day, walking slowly round the stick. The kind-hearted wife of the bailiff of the farm at last heard of the circumstance, and immediately went to afford what relief she could to the poor bird. She told me that, on arriving at the spot, she found the hen bird much exhausted, and that she had made a circular beaten track around the dead pigeon making now and then a little spring towards him.—On the removal of the dead bird, the hen returned to the dove-cot.

Instance of Sagacity in a Dog.—He informed me that a friend of his, an officer in the 44th regiment, who had occasion, when in Paris, to pass one of the bridges across the Seine, had his boots, which had previously been well polished, soiled by a poodle dog rubbing against them. He in consequence went to a man who was stationed on the bridge, and had them cleaned. The same circumstance having occurred more than once, his curiosity was excited, and he watched the dog. He saw him roll himself in the mud of the river, and then watch for a person with polished boots, against which he contrived to rub himself. Finding that the shoe-black was the owner of the dog, he taxed him with the artifice—and after a little hesitation, he confessed that he had taught the dog the trick, in order to procure customers for himself. The officer being much struck with the dog's sagacity, purchased him at a high price, and brought him to England. He kept him tied up in London some time, and then released him.—The dog remained with him a day or two, and then made his escape. A fortnight afterwards he was found with his former master, pursuing his old trade of soiling gentlemen's boots on the bridge.

Ingenuity of Bees.—A large brown slug made its way into a glass hive, where the operation of the bees could be distinctly seen. Having killed the slug, and finding that they were unable to get it out of the hive, they covered it over with the thick resinous substance called propolis, and thus prevented its becoming a nuisance to the colony. In the same hive one of the common brown shelled snails also gained admittance. Instead of embedding it in propolis, the bees contented themselves with fixing it to the bottom of the hive, by plastering the edge with that substance. I have now in my possession a regular fortification made of propolis, which one of my stock of bees placed at the entrance of their hive, to enable them the better to protect themselves from the attacks of wasps. By means of this fortification a few bees could effectually guard the entrance by lessening the space of admission, which I had neglected to do for them.

A Poodle Dog.—A friend of mine had a poodle dog possessed with more than ordinary sagacity, but he was, however, under little command. In order to keep him in better order, my friend purchased a small whip with which he corrected his dog once or twice during a walk. On his return, the whip was put on a table in the hall, and the next morning it was missing. It was soon afterwards found concealed in an outbuilding, and again made use of in correcting the dog. It was however, again lost, but found hidden in another place. On watching the dog, who was suspected of being the culprit, he was seen to take the whip from the hall table, and run away with it in order again to hide it. The late James Cumming, esq. was the owner of the dog, who related this anecdote to me.

Proper Pride in a Dog.—A gentleman, a good shot, lent a favorite old pointer to a friend, who had not much to accuse himself of in the slaughter of partridges, however much he might have frightened them. After ineffectually firing at some birds which the old pointer had found for him, the dog turned away in apparent disgust, went home, and never could be persuaded to accompany the same person afterwards.

The Antipathy of the Hen to Water.—It is well known, yet the following is a curious instance of habit overcoming nature:—A hen, who had reared three broods of ducks in three successive years, became habituated to their taking to the water, and would fly to a large stone in the middle of the pond, and patiently and quietly watch her brood as they swam about it. The fourth year she hatched her own eggs; and finding that her chickens did not take to the water as the ducklings had done, she flew to the stone in the pond, and called them to her with the utmost eagerness. This recollection of the habits of her former charge, though it had taken place a year before, is not a little curious.

To keep Plums and Peaches ripe through the year.—Beat well up together equal quantities of honey and spring water; pour the mixture into an earthern vessel; put in the fruit all freshly gathered, and cover them up quite close. When any of the fruit is taken out, wash it in cold water and it will be fit for immediate use.

A Grain of Corn.—One grain of corn, dropped by accident on the land of Major Jacob Clark, of Durham, Mass. yielded nine ears, with sixteen rows each, averaging 40 kernels to each row, and making the whole produce of a single grain about five thousand.

Snow in July.—There was a fall of snow in Claremont, Sullivan Co. N. H. on the 1st inst.